Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	25 June 3035
Team ID	LTVIP2025TIMID20837
Project Name	ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/

Guidelines:

Include all the processes (As an application logic / Technology Block)
Provide infrastructural demarcation (Local / Cloud)
Indicate external interfaces (third party API's etc.)
Indicate Data Storage components / services
Indicate interface to machine learning models (if applicable)

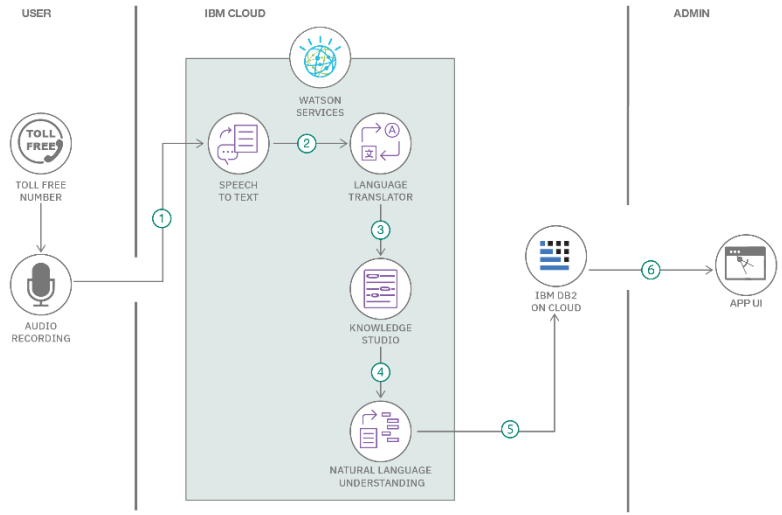

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Dashboard Interface	Visual interface to explore toy sales trends, regional stats, seasonal patterns	Tableau Public/Desktop
2.	**Data Storage**	Stores toy manufacturing and sales data for analysis	Excel / Google Sheets / CSV
3.	Data Processing	Prepares and cleans datasets before visualization	Tableau Prep / Excel
4.	**Survey Collection**	Captures user preferences or toy feedback	Google Forms / Typeform
5.	Survey Visualization	Displays user feedback as charts on the dashboard	Tableau Embedded Charts
6.	User Access Control	Allows admin to manage user login, access, and dashboard usage	Manual / Google Auth
7.	**Data Export Function**	Lets users download charts and graphs for reports or analysis	Tableau Export (PDF/PNG)
8.	Notifications/Follow-up	Sends updates to users about new dashboards or toy trends	Email (via Gmail integration / Mailchimp)

9.	Platform Hosting	Hosts the dashboard or project for online access	Google Drive / Tableau Public / GitHub Pages

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	User-Friendliness	Simple and intuitive dashboard interface for students, parents, and analysts	Tableau (filters, tooltips, charts)
2.	**Data Visualization**	Clear graphical representation of toy trends by region, season, and type	Tableau Public/Desktop
3.	Data Import & Refresh	Ability to upload, clean, and update datasets	Excel / Tableau Prep
4.	Accessibility	Accessible on web and mobile for easy interaction	Tableau Public, Web Browser
5.	Survey Integration	Collects and visualizes user preferences through embedded surveys	Google Forms + Tableau
6.	Security	Ensures secure access through authentication methods (email/Gmail)	Google Auth / Login System
7.	Exportability	Allows users to download insights for offline use	PDF/PNG Export (Tableau)
8.	Scalability	Can be expanded to include more regions, years, or toy categories	Tableau, Modular Dataset Design

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d